### REMARKS/ARGUMENTS

## 1) Status of the claims.

Claims 2 and 5-6 are cancelled; Claims 1 and 7 are amended; Claims 1, 3-4 and 7-21 are pending.

# 2) Support for amended claims.

Amended Claims 1 and 7 are supported, for example, at previously presented Claims 1 and 7, and at specification page 6, lines 1-3.

No new matter is added.

#### 3) Indication of allowable subject matter.

Applicants thank Examiner Wilson for indicating that Claim 4 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and rewritten to overcome all formal requirements (see Office Action page 5). The indication of allowable subject matter is truly appreciated.

#### 4) The objection to Claims 1 and 7 is traversed (Office Action page 3).

The objection to Claims 1 and 7 is mooted by the amendment of these claims to remove R<sup>5</sup> and R<sup>5</sup> from Figures (I) and (I'), and from the text of the claims. Withdrawal of the objection is requested.

5) The anticipation rejection of Claims 1, 3, 7-9 and 11-13 as being unpatentable in view of <u>Kitamoto (JP H10-189248 A, Machine Translation)</u> is traversed (Office Action page 3).

Present Claims 1 and 7 are the sole independent claims. Present Claim 1 is drawn to a fluoranthene of the general formula I

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$$X \xrightarrow{R^3}$$
  $(I)$ 

wherein  $R^1$ ,  $R^2$ ,  $R^3$  are each independently hydrogen, alkyl, an aromatic radical, a fused aromatic ring system, or a heteroaromatic radical;

wherein at least one of the radicals  $R^1$ ,  $R^2$  and/or  $R^3$  is not hydrogen; wherein

X is an alkyl radical or a radical of the formula (I')

$$\mathbb{R}^3$$
 (I')

or an oligophenyl group; and

wherein, when X is a radical of the formula (I'), in the radial of the formula (I'),  $R^1$  to  $R^3$  have the same meanings as in formula (I);

wherein the oligophenyl group is a group of the general formula (IV)

$$(Ph)m^{1}$$

$$(Ph)m^{2}$$

$$(Ph)m^{3}$$

$$(Ph)m^{5}$$

$$(Ph)m^{4}$$

wherein Ph is in each case phenyl which, optionally, may be substituted in all 5 substitutable positions by a group of the formula (IV),

wherein, in the oligophenyl group of the general formula (IV), the indexes  $m^1$ ,  $m^3$  and  $m^5$  are each 0 and  $m^2$  and  $m^4$  are each 1, or the indexes  $m^2$  and  $m^4$  are each 0 and  $m^1$ ,  $m^3$  and  $m^5$  are each 1;

n is 2 or 3 or, where X is an oligophenyl group, n is from 1 to 20; with the proviso that  $R^1$ ,  $R^2$ ,  $R^3$  and X are not at the same time phenyl.

Present Claim 7 is drawn to an organic light-emitting diode comprising as an emitter molecule a fluoranthene. In Claims 1 and 7, X is an alkyl radical or a radical of the formula (I')

$$R^3$$
 (l')

or an oligophenyl group.

The Office has cited <u>Kitamoto</u> for Compound 108, that appears to be 7,10-diphenyl-8-(4'-phenylphenyl)fluoranthene, which, appears to have the structure:

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In Claims 1 and 7, in formula (I), 
$$R^{2} \qquad \qquad R^{1} \qquad \qquad , \text{ when } R^{1}$$

and R<sup>3</sup> are phenyl (e.g., an aromatic radical), and R<sup>2</sup> is H, formula (I) becomes:

In this condition, when X is an oligophneyl group of general formula (IV), for Kitamoto's Compound 108 to be anticipatory, X must be capable of being an unsubstituted biphenyl, as shown below in side-by-side comparison:

But X in present Claims 1 and 7 cannot be merely an unsubstituted biphenyl, so Kitamoto's Compound 108 cannot anticipate present Claims 1 and 7.

In present Claims 1 and 7, X either comprises 2 phenyl groups (e.g., when m<sup>1</sup>, m<sup>3</sup> and m<sup>5</sup> are each 0 and m<sup>2</sup> and m<sup>4</sup> are each 1), which, optionally, may be substituted in all 5 substitutable positions by a group of the formula (IV):

or

X comprises 3 phenyl groups (the indexes m<sup>2</sup> and m<sup>4</sup> are each 0 and m<sup>1</sup>, m<sup>3</sup> and m<sup>5</sup> are each 1), which, optionally, may be substituted in all 5 substitutable positions by a group of the formula (IV), as shown below:

Thus, comparing <u>Kitamoto's</u> Compound 108 to the two unsubstituted oliogophenyl variants of the fluoroanthrene of Claims 1 and 7, as described *supra*, yields

<u>Kitamoto's</u> Compound 108 therefore cannot anticipate present Claims 1 and 7, and the claims depending therefrom, because it does not describe or suggest all of the features of present Claims 1 and 7 and the claims depending therefrom. Withdrawal of the anticipation rejection is requested.

6) The obviousness rejection of Claims 10 and 14-21 as being obvious in view of Kitamoto and Nishi (US 2001/0004190 A1) is traversed (Office Action page 4).

Claims 10 and 14-21 depend, either directly or indirectly, from Claim 1. As described, *supra*, <u>Kitamoto's</u> Compound 108 does not describe or suggest all of the features of present Claim 1 and the claims depending therefrom. Further, to make an obviousness rejection based on Compound 108, the Office must show that that <u>Kitamoto</u> and/or <u>Nishi</u> 1)

would have provided reason to one of ordinary skill in the art to select Kitamoto's Compound 108 as a starting material, and 2) these references, either alone or in combination, would "have suggested making the specific molecular modifications necessary to achieve the claimed invention." (see Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd., 492. F.3d 1350 (Fed. Cir. 2007), and P&G v. Teva Pharms. USA, Inc., 566 F.3d 989, 944 (Fed. Cir. 2009)). The Office has not shown either of these required motivations. Nishi, whom the Office relies upon to provide use of a device in "mobile or stationary visionary display units like a television, a mobile phone, a laptop, or a vehicle" (see Office Action page 5) does not remedy the deficiencies of Kitamoto. Thus, Claims 10 and 14-21, as a matter of law, cannot be obvious in view of Kitamoto and Nishi. Withdrawal of the obviousness rejection is requested.

#### 7) Conclusion.

Applicants submit the present application is now in condition for allowance. Early notification to this effect is earnestly solicited.

Respectfully submitted,

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